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Correspondence

The Benefits of Strain Donation

The current popularity of mutant mice for use in immunological and other types of research is showing no signs of waning. Unfortunately, neither is the average per diem cost for cage space at most major research institutions. In addition to shouldering the ongoing costs of colony maintenance, National Institutes of Health-sponsored investigators are also responsible for sharing the mutant mice they generate with their colleagues in a timely fashion, lest their funding be affected (http://www.nih.gov/science/models/mouse/sharing/).

What's a harried researcher to do? The answer is surprisingly simple. NIH, (specifically, the National Center for Research Resources) has made it a priority to establish a number of mouse repositories whose primary responsibility is to preserve and distribute mice to the scientific community so that researchers don't have to. For example, we at The Jackson Laboratory (TJL) Repository would preserve and distribute strains that have been approved to be added to our resources (http://www.jax.org/grc/index.html).

In addition to fulfilling their NIH obligation to share mice and freeing up their technicians' time, researchers realize additional benefits by handing off their mice to repositories. When torrential rainfall in 2001 caused flooding at Baylor College of Medicine, an estimated 35,000 mice were lost, interrupting or even terminating numerous research projects. More recently, hurricane Katrina resulted in the loss of many strains as well as the disruption of research programs in the Gulf region. Mutant mice lost to such calamities can easily be retrieved from a repository—if they were deposited. Mice are usually rederived upon arrival at a repository, so donors are often able to get back several breeder pairs at a higher health status, frequently gratis. Repositories maintain public databases of their holdings, often extensively cross referencing a mouse strain's information to multiple other databases, putting it in context with numerous online datasets in a fashion not anticipated by many donors.

Once a strain is accepted into the repository, costs for importation and cryopreservation usually are borne by NIH-derived repository funds. However, repository funds are not unlimited, and repositories must frequently make hard decisions to prioritize strains. In the face of uncertain federal budgets and to help investigators comply with the NIH sharing plan, TJL has also initiated a Sponsored Strain Distribution program, whereby donors are able to provide support for the importation and cryopreservation of their models from their own grant or institutional funds. This new program allows greater flexibility in the funding sources that can be utilized to support mouse donations. More information about the Sponsored Strain Distribution program can be found at http://jaxmice.jax.org/services/sponsoreddistribution.html.

Researchers incur little or no cost when they deposit their strains in a repository, and the savings they can realize are significant. With additional funding options now available, it is our hope that more scientists will choose to reap the benefits.

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